



## PATENT ABSTRACTS OF JAPAN

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(21) Application number: **10372373**(22) Date of filing: **28.12.1998**(71) Applicant: **KYOWA HAKKO KOGYO CO LTD**(72) Inventor: **SUZAWA TOSHIYUKI  
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KARASAWA HIROSHI****(54) LONG-ACTING TYPE DIGESTIVE TRACT  
MOVEMENT PEPTIDE****(57) Abstract:**

**PROBLEM TO BE SOLVED:** To obtain a compound (salt) having digestive tract movement activity excellent in persistency, useful for treating a diabetic stomach anesthesia, torporific intestinal blockage, etc., by bonding a polyalkylene glycol to a peptide having digestive tract movement activity.

**SOLUTION:** One or more polyalkylene glycols such as a polyalkylene glycol of the formula [R1 is an alkyl or an alkanoyl; M1 is (OCH2CH2)r-(OCH2CH2CH2)s (r

and s are each an integer of  $\geq 0$ ); X1 is a single bond or a (CH2)t (t is 1-5); R2 is a group having reactivity to a peptide having digestive tract movement activity or the like] are bonded to the peptide having digestive tract movement activity such as motilin directly or through a spacer such as cysteine. The polyalkylene glycols have preferably 1,000-1,000,000 average molecular weight. Preferably, the dose of the compound (salt) is 25-500  $\mu\text{g}$  per adult daily.

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